

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) A dissymmetric particle of nanometric or mesoscopic size, that has an inorganic part ~~eonsisting comprised~~ of a material A and an organic part ~~eonsisting comprised~~ of a material B, ~~characterized in that wherein~~:
  - the inorganic material A is a mineral oxide or a metal;
  - the organic material B is a polymer ~~eonsisting comprised~~ of recurrent units derived from a vinyl compound;
  - the organic part is substantially spherical in shape;
  - the two parts are bound by physicochemical or covalent interactions;
  - the size of each of the parts is between 5 nm and 1  $\mu\text{m}$  [,] ~~preferably between 50 nm and 250 nm~~.
2. (Currently Amended) The particle as claimed in claim 1, ~~characterized in that wherein~~ its size is between 1 nm and 100 nm or between 100 nm and 1  $\mu\text{m}$ .
3. (Currently Amended) The particle as claimed in claim 1, ~~characterized in that wherein~~ the inorganic material A is an oxide chosen from silica, iron oxides, aluminosilicates, titanium dioxide ~~and or~~ alumina.

4. (Currently Amended) The particle as claimed in claim 3, ~~characterized in that wherein~~ the inorganic material A is a metal chosen from metals that are stable in an aqueous medium.
5. (Currently Amended) The particle as claimed in claim 1, ~~characterized in that wherein~~ the inorganic material bears an organic group.
6. (Currently Amended) The particle as claimed in claim 5, ~~characterized in that wherein~~ the organic group is chosen from alkyl groups, and amine, thiol or nitrile functions.
7. (Currently Amended) The particle as claimed in claim 1, ~~characterized in that wherein~~ the polymer comprises recurrent units -CR=CR'-, which may be identical or different, in which:
  - R represents H or an alkyl group;
  - R' represents H, an alkyl group, an aryl group, an alkylaryl group, an alkenylaryl group, a pyridyl group, a nitrile group, a group -COOR" or a group -OC(O)R" in which R" is H, an alkyl or an alkenyl.
8. (Currently Amended) The particle as claimed in claim 7, ~~characterized in that wherein~~ the alkyl group or the aryl group bears a functional group.
9. (Currently Amended) The particle as claimed in claim 7, ~~characterized in that wherein~~ the polymer is crosslinked or noncrosslinked.

10. (Currently Amended) The particle as claimed in claim 1, ~~characterized in that~~ wherein the inorganic part has the shape of a sphere.
11. (Currently Amended) The particle as claimed in claim 10, ~~characterized in that~~ wherein it has the shape of a dumbbell, the organic and inorganic parts having substantially the same size.
12. (Currently Amended) The particle as claimed in claim 10, ~~characterized in that~~ wherein it has the shape of a snowman, the inorganic part having a size that is clearly different from the organic part.
13. (Currently Amended) The particle as claimed in claim 1, ~~characterized in that~~ wherein the inorganic part has the shape of an ellipse, of a disk, of a block or of a rod.
14. (Currently Amended) The particle as claimed in claim 1, ~~characterized in that~~ wherein the inorganic material is silica and the organic material B is a polystyrene or a copolymer of styrene and of divinylbenzene.
15. (Currently Amended) A method for preparing dissymmetric particles as claimed in claim 1, ~~characterized in that~~ wherein it comprises the following steps:
  - a) during a first step, the surface of particles having a size of between 5 nm and 1  $\mu$ m and ~~eonsisting comprised~~ of the inorganic material A is modified with a coupling agent C comprising a function  $F_C$  which exhibits affinity for one or more precursors of the polymer B;

- b) during a second step, the modified inorganic particles obtained at the end of step a) are brought into contact with the precursor(s) of the polymer B, in the presence of a free-radical initiator and of a surfactant in solution in a solvent, in proportions that allow the formation of one nodule of polymer per inorganic particle.

16. (Currently Amended) The method as claimed in claim 15, ~~characterized in that wherein~~ the particles are extracted from the reaction medium by evaporation of the solvent or by lyophilization.

17. (Currently Amended) The method as claimed in claim 15, ~~characterized in that wherein~~ the initial inorganic particles are used, for step a), in the form of a colloidal suspension for which the solids content is between 2 and 35%, and for which the pH is adjusted so as to allow the interaction with the coupling agent C.

18. (Currently Amended) The method as claimed in claim 15, ~~characterized in that wherein~~ the inorganic particles are silica particles having a diameter of approximately 100 nm.

19. (Currently Amended) The method as claimed in claim 15, ~~characterized in that wherein~~ the function  $F_C$  is a vinyl group, or a vinyl, allyl, styryl, methacryloyl or acryloyl group.

20. (Currently Amended) The method as claimed in claim 15, ~~characterized in that~~

wherein step a) is carried out by bringing the inorganic particles into contact with a macromonomer consisting of a macromolecule having a hydrophilic chain that ends with a polymerizable function  $F_C$ , and the reaction medium is stirred.

21. (Currently Amended) The method as claimed in claim 20, ~~characterized in that~~  
wherein the macromonomer is chosen from poly(ethylene oxide)s, hydroxycelluloses, poly(vinylpyrrolidone)s, poly(acrylic acid)s and or poly(polyvinyl alcohol)s, said compounds bearing the function  $F_C$ .
22. (Currently Amended) The method as claimed in claim 15, ~~characterized in that~~  
wherein step a) is carried out by covalent grafting of a coupling agent bearing a function  $F_C$  that is copolymerizable with the precursor(s) of the polymer B.
23. (Currently Amended) The method as claimed in claim 22, ~~characterized in that~~  
wherein the inorganic part A is a mineral oxide and the coupling agent is chosen from organosilanes corresponding to the formula  $R^1_nSiX_{4-n}$  ( $n = 1$  to 3), in which X is a hydrolyzable group and  $R^1$  is a radical comprising the functional group  $F_C$ .
24. (Currently Amended) The method as claimed in claim 23, ~~characterized in that~~  
wherein the coupling agent is a methacryloylalkyltrialkoxysilane.

25. (Currently Amended) The method as claimed in claim 22, ~~characterized in that~~  
wherein the inorganic particle A is a metal, and the coupling agent is chosen from organothiols R<sup>1</sup>SH ~~and or~~ amines R<sup>1</sup>NH<sub>2</sub> in which R<sup>1</sup> is a substituent bearing the functional group F<sub>C</sub>.
26. (Currently Amended) The method as claimed in claim 25, ~~characterized in that~~  
wherein the coupling agent is 4-vinylaniline.
27. (Currently Amended) The method as claimed in claim 15, ~~characterized in that~~  
wherein step a) is carried out by suspending the inorganic particles at a pH close to neutrality, and adding an amphiphilic compound consisting of a hydrophobic part that has a polymerizable group and of a polar head that bears a charge opposite to that of the surface of the particles.
28. (Currently Amended) The method as claimed in claim 27, ~~characterized in that~~  
wherein the amphiphilic molecules are chosen from compounds derived from styrene sulfonates and quaternary alkylammoniums, the two types of compounds bearing a hydrophobic group.
29. (Currently Amended) The method as claimed in claim 15, ~~characterized in that~~  
wherein step b) is carried out by bringing the modified particles of inorganic material A obtained at the end of step a) into contact with a monomer which is a precursor of the polymer B, in the presence of a polymerization initiator, said monomer bearing functions F<sub>B</sub> capable of reacting with the functions F<sub>C</sub>.

30. (Currently Amended) The method as claimed in claim 15, ~~characterized in that~~  
wherein step b) is carried out by bringing the particles of material A obtained at the end of step a) into contact with an oligomer of the polymer B, in the presence of a polymerization initiator.
31. (Currently Amended) The method as claimed in claim 15, ~~characterized in that~~  
wherein the dissymmetric particles obtained at the end of step b) are subjected to a further treatment aimed at modifying the surface groups of the material A that were not modified during step b).
32. (Currently Amended) The method as claimed in claim 29, ~~characterized in that~~  
wherein the monomer precursor is chosen from compounds having a vinyl group that plays the role of polymerizable function  $F_B$ .
33. (Currently Amended) The method as claimed in claim 32, ~~characterized in that~~  
wherein the monomer corresponds to formula  $HRC=CHR'$  in which:
  - R represents H or an alkyl group;
  - R' represents H, an alkyl group, an aryl group, an alkylaryl group, an alkenylaryl group, a pyridyl group, a nitrile group, a group  $-COOR''$  or a group  $-OC(O)R''$  in which R'' is H, an alkyl or an alkenyl.
34. (Currently Amended) The method as claimed in claim 33, ~~characterized in that~~  
wherein the monomer is chosen from styrene,  $\alpha$ -methylstyrene, vinylpyridine, vinyl

acetate, vinyl propionate, methyl methacrylate, ethyl acrylate, butyl acrylate, ethylhexyl methacrylate, acrylonitrile and or methacrylonitrile.

35. (Currently Amended) The method as claimed in claim 29, ~~characterized in that wherein~~ a mixture comprising one or more monomers having a group F<sub>B</sub>, and a monomer comprising a second group F<sub>B</sub>, is used.
36. (Currently Amended) The method as claimed in claim 30, ~~characterized in that wherein~~ the oligomer is chosen from the polymers or copolymers obtained from monomers having a vinyl group that plays the role of polymerizable function F<sub>B</sub> and optionally bearing a function that is crosslinking in nature.
37. (Currently Amended) The method as claimed in claim 15, ~~characterized in that wherein~~ the solvent is chosen from water and or water-alcohol mixtures in water/alcohol proportions of between 100/0 and 50/50.
38. (Currently Amended) The method as claimed in claim 15, ~~characterized in that wherein~~ the surfactant is chosen from anionic, cationic or nonionic surfactants.
39. (New) The particle of claim 1, wherein the size of each of the parts is between 50 nm and 250 nm.